



# Symposium on Educational Excellence 2024

## Flipping Evidence-Based Medicine education: Realigning Teaching Style with Objectives

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### Keywords

Teaching Style; Evidence-Based Medicine; Curriculum; Social Learning; Flipped Classroom

### Abstract

While it is clear there is a need for clinicians adept at efficient and effective analysis of primary literature in the ever-changing medical landscape, traditional educational approaches to imparting these skills often use teaching strategies that do not align with the underlying objectives. Traditionally, a heavy emphasis was placed on the didactic component of literary analysis; this may run opposite to what is known about Adult Learning Theory<sup>1</sup>. Rather, a focus on constructivist techniques may yield better results<sup>2</sup>. Further, "flipped classrooms" often expects trainees to use their limited free time to read content prior to a session.

In an effort to both teach fundamental Evidence-Based Medicine (EBM) concepts and allow for the practice of these skills, a curriculum was designed by modifying a model proposed by Rosenthal et al.<sup>3</sup>. The overall objective of this curriculum is to utilize constructivist approaches with residents directly engaged with and judging the scientific decisions made in the literature, presented in the context of a social learning approach, as well as taking advantage of cognitive strategies such as incorporated didactic sidebars. To this end, EBM sessions will be conducted as follows:

- Two residents will be assigned to be group guides and meet with faculty to select a relevant article and review strategic approach to the upcoming session;
- Residents will be split into two smaller groups to utilize social learning;
- Each group will have a predesignated guide to go through a structured systematic approach through each paper;
- The guide will lead from the conversation towards a prepared didactic on one of the predetermined relevant EBM topics;
- Faculty will be present to provide insight, clarification, or clinical application rather than lead the session.

This approach will be run in parallel to the current curriculum, alternating between old-and-new curricula (residents meet with faculty to decide on a relevant article and construct a didactic to teach the paper with varying degrees of audience participation and an expectation that residents read the paper). The two curricula will be compared directly to evaluate for degree of participation, perception of quality, and recall. Should results be significant, this may justify furthering the application beyond the Family Medicine program at OHSU.

## Objectives

1. The audience will reflect on which learning theories may be optimal for teaching EBM principles.
2. The audience will understand one strategy for applying constructivist and social learning theories for teaching EBM.
3. By the end of this session, the audience will be able to judge the efficacy of said strategy and determine if it may align with their own teaching objectives.

## References

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